

IP-6600-01
Solvent Ink
Color Ink Jet Printer
Installation Manual

U00087559701

Seiko I Infotech Inc.

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PREFACE

The IP-6600-01 Color Ink Jet Printer Installation Manual describes how to install the IP-6600-01 Color Ink Jet Printer (simply called the printer below).

Installation is an important work for the printer to work properly at the customer's site as it passed the predelivery test. Engineers should be familiarize themselves with the printer and install it at the correct location using the correct procedure and check it properly.

This manual covers unpacking, moving to the installation site, installation, assembly, cable connection and operation check, which should be carried out after the printer is delivered and unloaded in the customer's premises.

Before starting installation, take the time to read the Safety Precautions and Notes on Installation and Handling, which are written on the following pages.

This manual consists of the following sections:

- Section 1** describes the steps for installation, details of each step, required manpower and related sections. In addition, this section lists required tools. Familiarize yourself with the flow of installation.
- Section 2** details installation requirements. Before starting installation, check that the site chosen by the user meets these requirements.
- Section 3** shows the system configuration, appearance and names of components.
- Section 4** describes the procedures for unpacking, moving and installing the printer.
- Section 5** explains how to set parameters for specifying the conditions for plotting and data transmission and reception.
- Section 6** describes how to check the printer performance.
- Section 7** explains how to connect an interface cable to an external device.
- Section 8** explains how to check the system operation.



When using the printer, see also the following documents:

- IP-6600-01 Solvent Ink Color Ink Jet Printer User's Guide (U00086052300)
- IP-6600 Solvent Ink Color Ink Jet Printer Maintenance Manual (U00087444000)

Safety Precautions


The following symbols are used in this manual to ensure the proper use of the plotter and to prevent the plotter from being damaged.

Follow the instructions marked with the symbol.


 WARNING	Severe personal injury or death Failure to follow the guidelines marked with this symbol could result in severe personal injury or death.
 CAUTION	Minor personal injury or product and/or peripheral damage failure to follow the guidelines marked with this symbol could result in minor personal injury or product and/or peripheral damage.

Example of symbols:




This symbol () denotes items that require special care while executing a certain procedure or operation.



This symbol () denotes items that are forbidden.



This symbol () denotes items you should follow to prevent accidents or injury.



WARNING



Use the power supply voltage specified on the nameplate. DO NOT plug several devices into one electrical outlet as this might result in fire or electric shock.



DO NOT allow metal or liquids to touch the internal parts of the printer. Doing so may cause fire, electric shock, or other accidents.



DO NOT disconnect or connect the power cable with wet hands. Doing so may lead to electric shock.



Make sure the printer is well grounded. If it is not grounded, a short circuit may cause fire or electrical shock.



DO NOT disassemble or remodel the printer. DO NOT repair the printer by yourself. Doing so may cause fire, electric shock or other accidents.



DO NOT remove the fixed covers of the printer because they contain high-voltage and extremely hot parts. Careless removal might result in an electric shock or burn.



DO NOT damage, break, process, or heat the power cable. If it is damaged, replace it with a new one. Using a damaged power cable may cause fire or electric shock.



NEVER use the printer in a place of extreme humidity or any place where it can possibly be splashed by any liquids. If any liquids get into the printer, it could lead to fire, electric shock, or other serious accidents.



Turn the printer off and unplug the power cable immediately during a thunder storm.



WARNING



Power OFF the printer and unplug the power cable from the power outlet in any of the following cases:

- When putting your hands inside the printer.
- Smoke, strange noise or smells erupt from the printer.
- A piece of metal or any liquid touches the internal parts or slot of the printer.
- An error requiring service from a service center occurs.



Avoid ink ingestion or splashes on skin or in eyes. Keep ink bottles out of the reach of children. If ink is swallowed by mistake, do not try to vomit, but seek medical attention immediately.



CAUTION



DO NOT put any paper rolls on an unstable table or a tilted surface as they could fall leading to an injury.



Handle the paper rolls with care because they are very heavy. If you drop them, it could lead to personal injury.



Hold the electric cable by the plug when connecting and disconnecting it. Failing to do so may cause the cable to fray or break which could lead to electric shock and/or fire.



Cap the waste ink bottle tightly to prevent leakage before discarding it.



DO NOT get ink on your skin or clothes. Wash off any ink with immediately with soapy water.



When replacing the ink cartridge, place a sheet of paper under the bottle to prevent spillage and work in a well-ventilated area.

In order to ensure the safe operation of the printer heed all of the cautions and warnings contained throughout this manual.

Notes on installation and handling

Pay attention to the following items to make full and proper use of the printer.

Notes on installation and storage

1. Do not install the printer in an area where it is directly exposed to sunlight or strong light source.
2. Do not install the printer in an area where it will receive vibration, dust or water.
3. Do not install the printer in an area where ventilation is poor.
4. Do not install the printer in an area where it directly receives air from air conditioners, heaters or ventilators.
5. Use the printer in an area conforming to the specified operating conditions.
6. The printer should be installed on a level plane.
The printer should not be tilted more than two degrees. It should not be tilted during transportation. If the printer is not installed on a level surface, the print quality may deteriorate or the printer may fail. Be sure to lock casters to prevent movement of the printer.
7. There must be sufficient spaces for maintenance around the printer: left space: 60 cm; right space: 60 cm; front space: 100 cm; rear space: 100 cm.
These spaces are also required to ventilate the printer.
8. Install the printer in the place where a warp in the floor will not be caused by the weight of 170 kg.
9. Avoid the installation in a place where condensation may occur inside of the printer. In the case of condensation, leave the printer as it is until the condensation disappears. If it is used when condensation occurs, the printer may fail or may not print properly.
10. The printer weighs about 230 kg. When any power equipment, such as fork-lift truck, is not used to move or transport it, handle by four people. Otherwise, it may cause injury.

Precautions about the power supply

1. Install the printer near an electrical outlet which should be easily accessible.
2. Do not provide power to the printer through the same power line as for noise-generating devices, such as a motor.
3. The power supply voltage setting must be matched with the local electric power specification.
4. Connect the power cable to an electrical outlet. Do not put many loads on one electrical outlet.

Handling precautions

1. Turn the power off, wait for at least ten seconds, and turn the power on again.
2. Do not place anything on top of the printer. Do not rest your elbow on the printer.
3. Open and close the top cover gently with both hands from the front of the printer.
4. Before connecting or disconnecting the interface connector, turn the printer off.
5. Do not wipe the cover surface with benzene or paint thinner. The coating may come off or deteriorate.
Wipe the cover clean with a soft cloth. If the cover is very dirty, use a cloth moistened with a neutral detergent.
6. Do not touch the ink-jet head surface.

Precautions about consumables

1. Always use the recommended consumables (paper, ink, etc.). Failure to follow this instruction may cause poor print quality or a breakdown.

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Section 1 Installation

1.1 Installation Overview

Table 1-1 lists the steps for installation and required manpower.

Table 1-1 Installation Overview

Step		Work	Manpower	Refer to
1	Transfer to unpacking area	Move the printer to an unpacking area.	2(*)	4.1
2	Unpacking	Remove the printer from the box and check the contents against the packing list	2(*)	4.2
3	Moving to installation site	Move the printer to the installation site.	2(*)	4.3
4	Installation	Install the printer, components and accessories and connect the power cable.	1	4.4
5	Parameter setting	Setting parameters for drawing and transmission.	1	Section 5
6	Printer operation check	Check print quality.	1	Section 6
7	Interface cable connection	Connect the interface cable.	1	Section 7
8	Printer operation check	Connect the printer with the host computer to check the system performance. Check that the system works properly.	1	Section 8

* Six people are required to lift the printer. (Main body weight: about 230 kg; Packaged weight: about 285 kg)
Use a fork-lift truck or a cart to move or transport the printer. The route for carrying it should be checked in advance, and a sufficient number of workers should be made ready.

1.2 Required Tools

Table 1-2 lists the tools required for installation.

Table 1-2 Main Tools

Item	Unit	Remarks
Cutting pliers	1	To cut PP bands and insulation lock ties
Cutter	1	To unpack
Philips screwdriver JIS B 4633 (2)	1	To loosen screws holding the main body
Normal screwdriver JIS B 4609 (45x50)	1	To loosen screws holding the main body
Wrench 13 mm	2	To unpack
Hexagon wrench (M4)	1	To loosen cooling fans and fitting plate
Hexagon wrench (M8)	1	To loosen metal pedestals
Socket wrench 9.5 mm □	1	To loosen stand reinforcement plate
Torque screwdriver (49 N (5 kgf))	1	To tighten carriage covers

Section 2 Installation Site Check

The environmental conditions (including power supply) should be checked before installation. Therefore, it is desirable to check the planned installation site before delivering the printer. The following items should be checked.

2.1 Temperature and Humidity

The conditions for the installation site are shown below.

(1) The temperature and humidity should be kept constant.

Table 2-1 lists the temperature and humidity at the installation site.

Table 2-1 Environmental Conditions

Item	Remarks/conditions
Temperature	Operating: See Figure 2-1. Non-operating: 5 to 35 °C Print quality guarantee: 15 to 30 °C
Relative humidity (no condensation)	Operating: See Figure 2-1. Non-operating: 10 to 80% Print quality guarantee: 30 to 70%
Temperature gradient (no condensation)	Operating: 10 °C/h or less Non-operating: 20 °C/h or less

Operating temperature and humidity range

Temperature: 15 to 30°C

Humidity: 30 to 70% RH

HINT: To achieve high-quality plotting, use the printer in the guaranteed environment: 20 to 25 °C.

(2) The printer should not be subject to mechanical vibration.

(3) The air must be clean.

Avoid dusty places.

(4) The printer should not be exposed to direct sunlight.

Make sure that it is not exposed to the afternoon sunlight.

(5) The printer should not be exposed to air exhausted from ventilation outlets.

(6) The ventilation should be good.

2.2 Installation Floor

The floor of the installation site should meet the following requirements:

(1) The floor should be level.

The floor should be level to distribute the load on the leveling feet and keep the printer horizontal. (Levelness: within two degrees on both the long and short sides on the bottom of the printer (visual check))

The pallet has casters, so there should be no obstructions in the path to move it on casters.

(2) The floor should have sufficient strength that holds the weight of the printer.

The floor strength that supports the casters and casters is shown below.

- Printer weight 235 kg (including consumables)
- Load on a caster 60 kg or less

The parts of the floor where the loads are placed (caster positions) are shown in Figure 2-1.

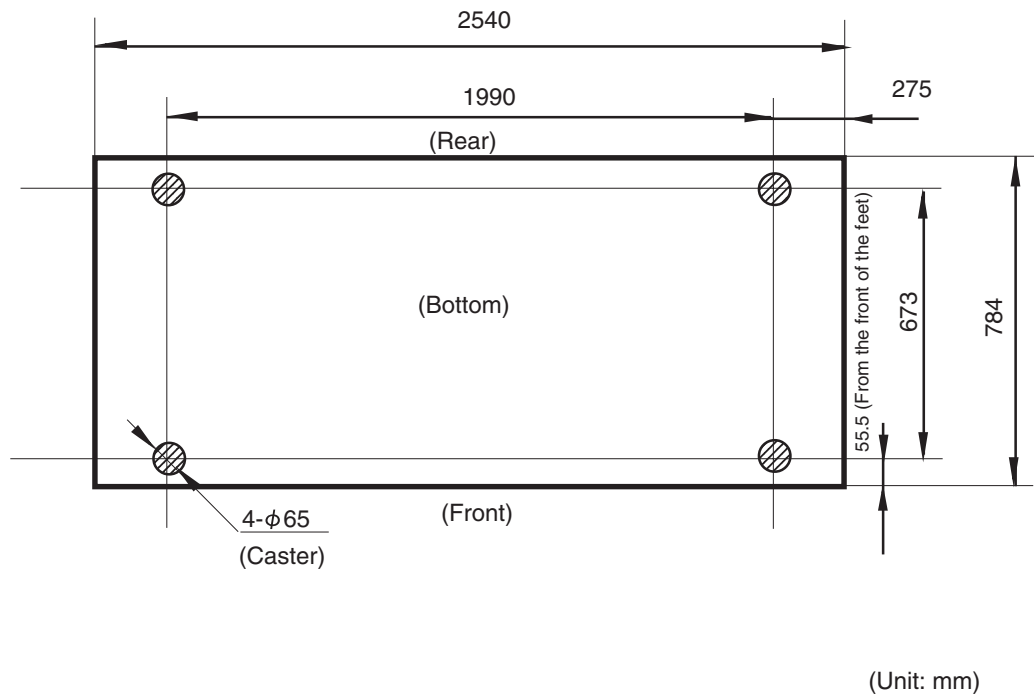


Figure 2-1 Caster Positions

2.3 Installation Space

There must be a sufficient space around the printer for the replacement of frequently used parts, for the output of drawings, and for ventilation. In addition, the maintenance space, shown below, is required to repair the printer or replace components.

The installation/maintenance space is shown in Figure 2-2.

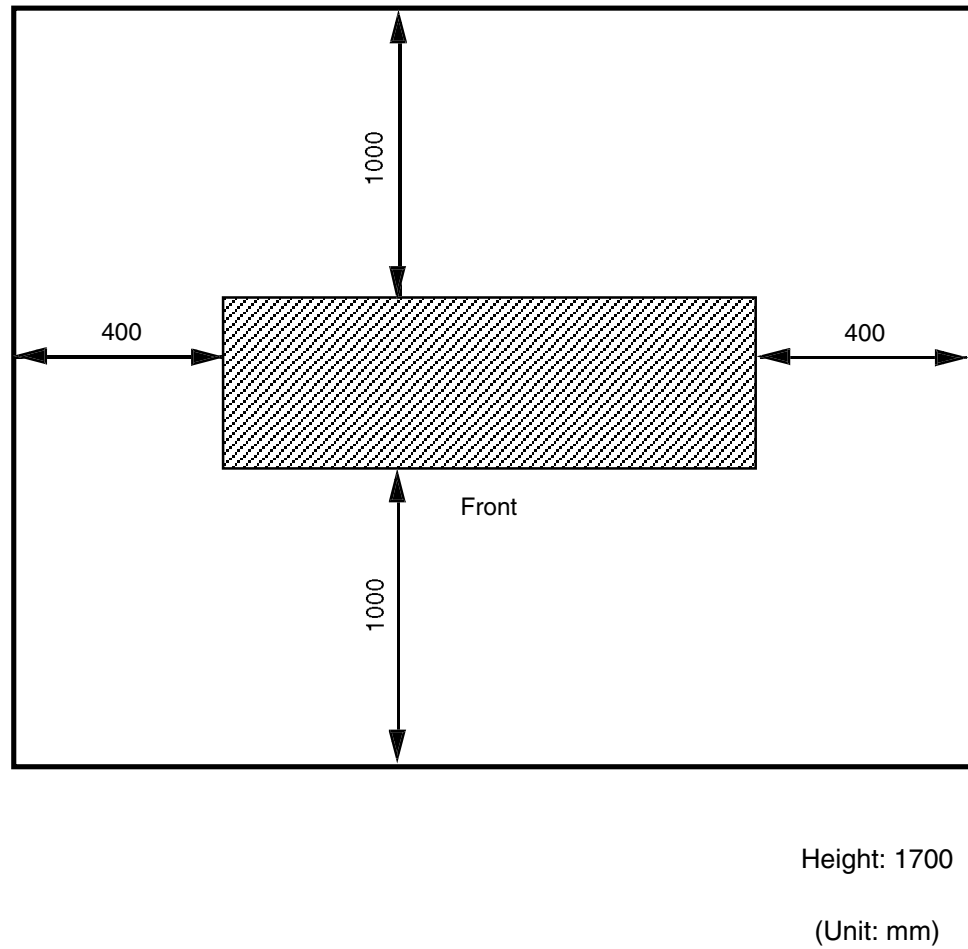


Figure 2-2 Installation/Maintenance Space

2.4 Power Supply Requirements

The requirements (specifications) for connecting the power cable of the printer are shown below.

(1) Power supply specifications

The power supply specifications for the printer are as follows:

Verify that the power supply at the site meet the following specifications:

- Power supply voltage :100 to 240 VAC \pm 10%, single phase
- Power frequency :50/60 Hz \pm 1%
- Power consumption :1440 VA or less
- Instantaneous interruption :20 ms or less
- Grounding :D (The 3rd) - class or higher
- Power plug :JIS C 8303 3P 125 V 15 A plug
- Power cable length :3 m

CAUTION

An exclusive ground cable should be used to prevent induction noise. It should not be laid together with the power cable.

(2) AC outlet

The power cable length is 3 m. There must be an electrical outlet within 3 m of the rear of the printer. Figure 2-3 shows the shape and phases of the outlet.

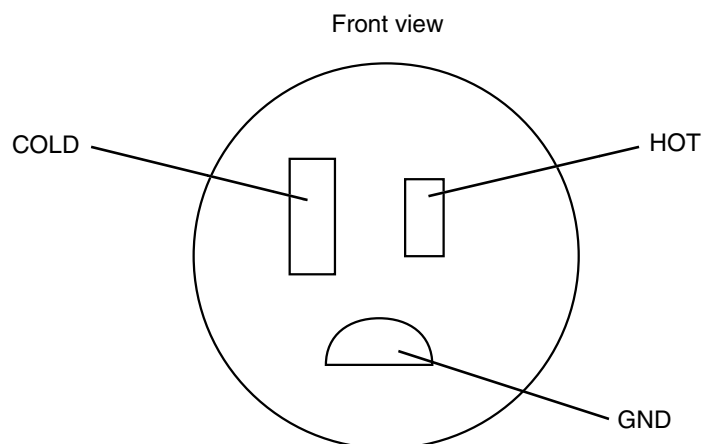


Figure 2-3 Electrical Outlet

Section 3 Printer Configuration and Names of Components

This section shows the printer configuration and the names of components as a basic knowledge required for unpacking, transportation and installation as described in **Section 4**.

The printer consists of three major components.

- Standard components (main body and accessories)
- Options
- Consumables

The standard components are common to all configurations, but options and consumables are chosen by the customer.

The configuration and the names of the components are shown below.

● IP-6600 standard components

Table 3-1 IP-6600 Standard Components

Name of component	Model	Quantity	Remarks
Main body	IP-6600-01	1	(Including the followings) - Waste ink bottle IP6-109 ----- 1 - Paper roll (for installation) ----- 1 - Paper tube 64" ----- 1
Accessories		1 set	- Power cord ----- 2 - SCSI cable ----- 1 - Starter kit (Bk,C,M,Y,Lc,Lm) IP6-110----500 ml each, 1 each - + screw driver ----- 1 - User's Guide ----- 1 - Maintenance kit IP6-108 ----- 1 set • Cap cleaning liquid: 100ml • Wiper cleaning liquid: 100ml • Cleaning swab: 50 pieces • Syringe: 10 pieces

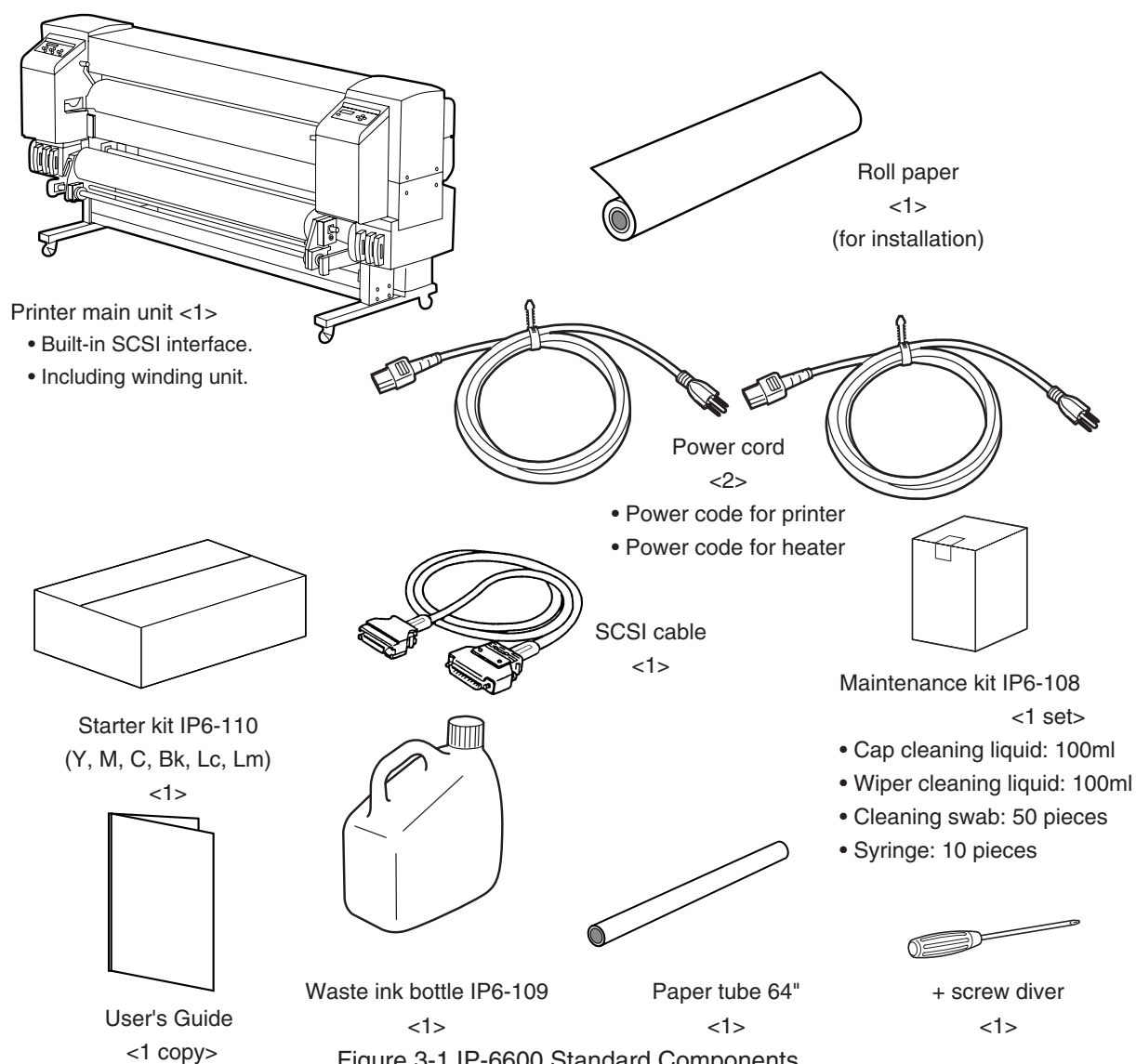


Figure 3-1 IP-6600 Standard Components

● Options

- Dryer 64 (IP-260) : 1
- Roll cover 64 (IP-261) : 1
- Exhaust attachment (IP-262) : 1
- PS RIP (Photo Print 4 Dx) (IP-540) : 1
- PS RIP (Photo Print 4 Server) (IP-541) : 1

● Consumables

Table 3-2 Consumables (Ink)

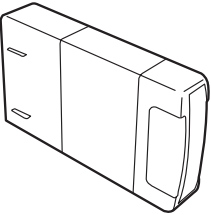
No.	Name	Ink capacity	Quantity	External view / Remarks
IP6-111	Y (Yellow)	1000 ml	1	
IP6-112	M (Magenta)	1000 ml	1	
IP6-113	C(Cyan)	1000 ml	1	
IP6-114	Bk (Black)	1000 ml	1	
IP6-115	Lc (Light cyan)	1000 ml	1	
IP6-116	Lm (Light magenta)	1000 ml	1	

Table 3-3 Consumables (Waste ink bottle)


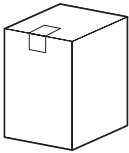
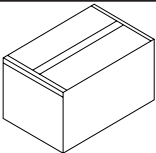
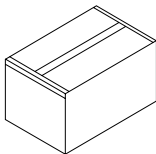
No.	Name	Quantity	External view / Remarks
IP6-109	Waste ink bottle	1	

Table 3-4 Consumables (Others)

No.	Name	Quantity	External view / Remarks
IP6-108	Maintenance kit - Cap cleaning liquid: 100ml - Wiper cleaning liquid: 100ml - Cleaning swab: 50 pieces - Syringe: 10 pieces	1	
IP6-117	Cleaning kit - Cleaning liquid cartridge: 6 - Dummy cartridge: 6	1	
IP6-137	Storage kit - Maintenance liquid cartridge: 6 - Dummy cartridge: 6	1	

Section 4 Unpacking, Transportation and Installation

The printer is installed in the following steps:

- (1) Transfer to an unpacking area
- (2) Unpacking
- (3) Moving to the installation site
- (4) Installation

CAUTION

Sudden changes of temperatures may cause condensation inside the printer and its failure.

If there is a large difference between room temperature at the installation site and the outside temperature as in winter, leave it in its carton for an hour or more to warm up before starting installation.

1. Leave the printer at an intermediate temperature between room temperature and outside temperature for about an hour.
2. Leave the printer at room temperature for more than two hours.

4.1 Transfer to an Unpacking Area

4.1.1 Unpacking area selection

Take the following precautions when selecting an unpacking area:

- (1) Since the printer is a precision piece of equipment, vibration and shock have a bad effect on its performance. The unpacking area should be as close to the installation site as possible to shorten the distance to move it after unpacking.
- (2) The unpacking area should be large enough to temporarily store packing materials, unnecessary things and accessories to be installed.

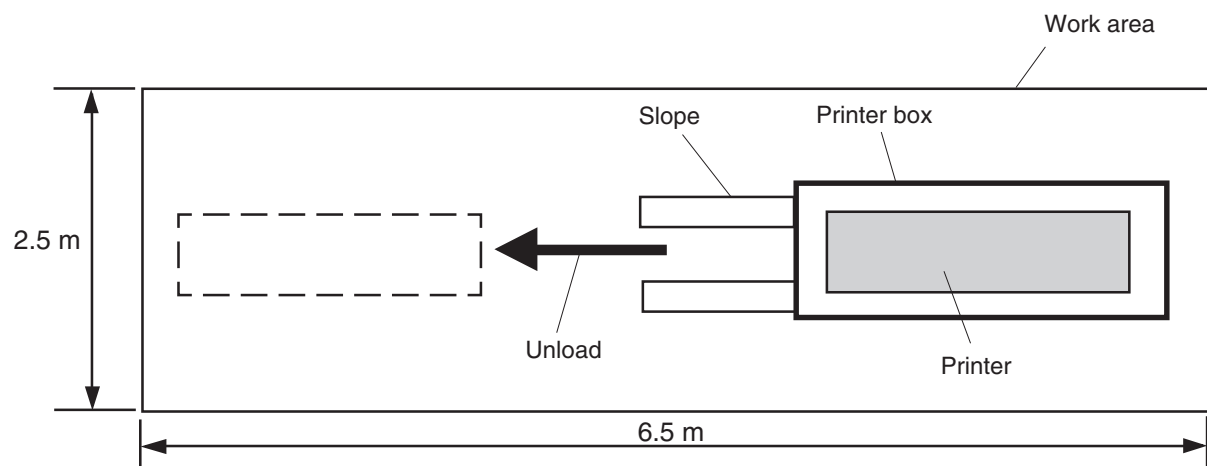


Figure 4-1 Unpacking Area

- (3) Since unpacking makes noise, carefully choose an unpacking area so that it does not affect other works which are done nearby.

4.1.2 Transfer method

(1) Preparation for transfer

Check the transfer route carefully and confirm that there is no obstruction in the way.

(2) Transfer

Since the gross weight of the printer is about 230 kg, it should be moved with a fork-lift truck or a cart. If no equipment is used, six people are required to lift the printer.

(3) Precautions on transfer

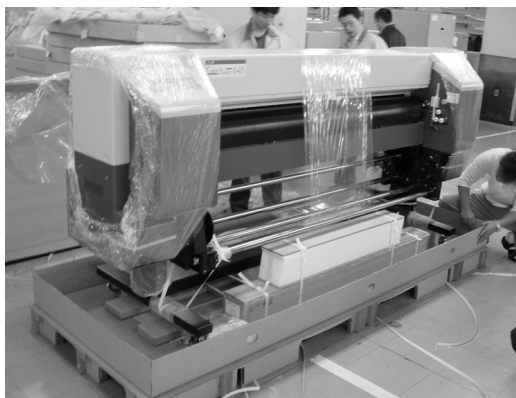
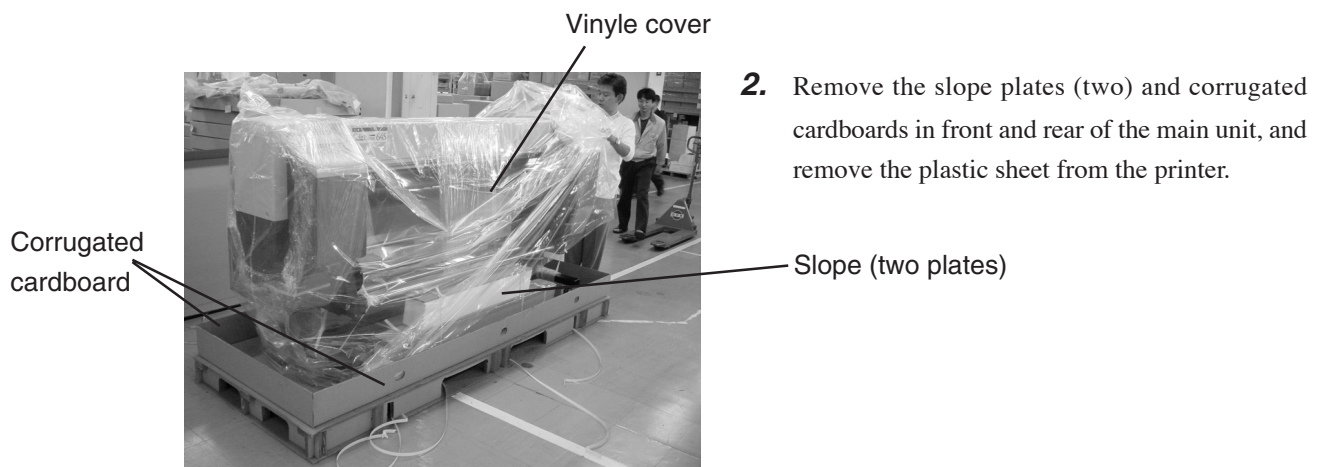
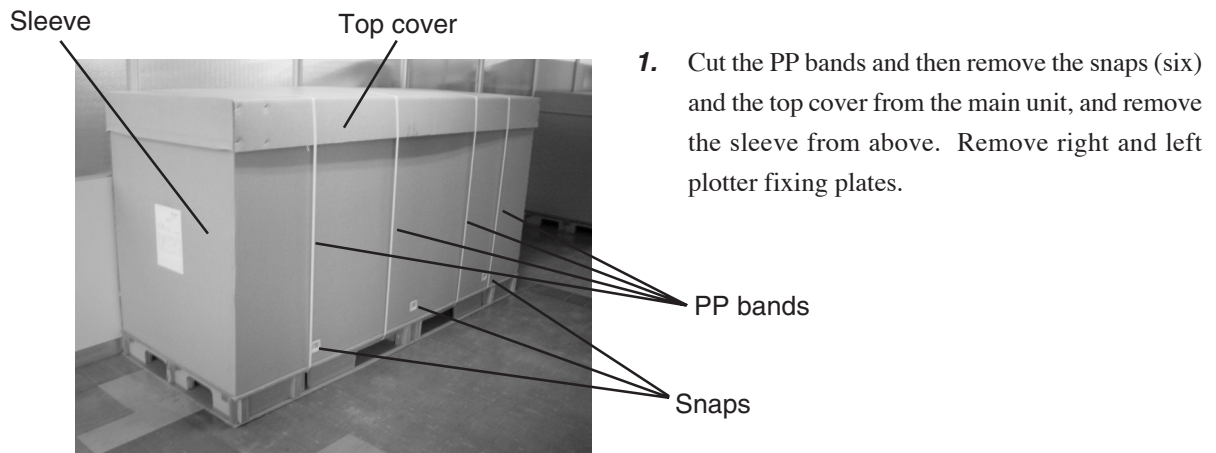
- If workers move the printer, safety precautions must be followed.
- Keep the printer horizontal during transportation.
- Be careful not damage any existing facilities when moving the printer.

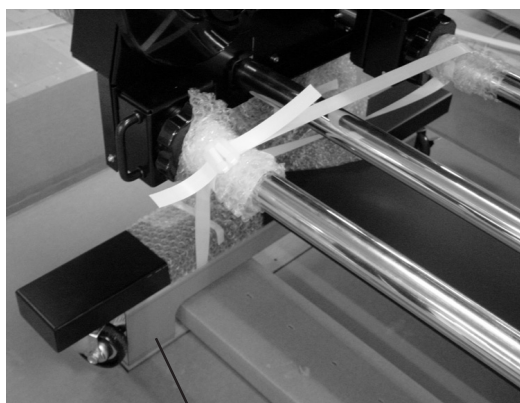
4.2 Unpacking

After unloading, unpack and remove the printer from the package and check its components.

4.2.1 Unpacking procedure

Unpack the printer as follows:





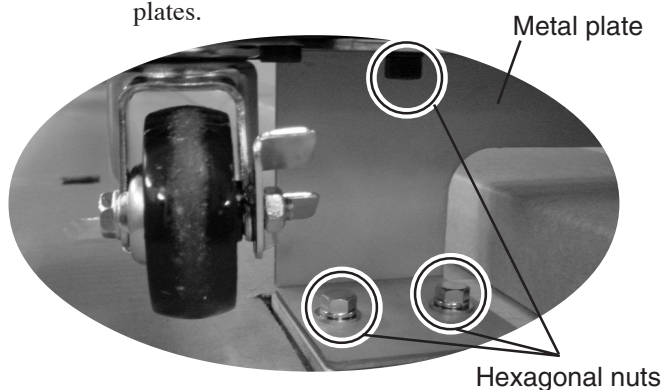
Matal plate



Slope



3. Remove the hexagonal nuts of the right and left metal plates fixing the printer legs (6 positions) with the hexagonal wrench and remove the metal plates.

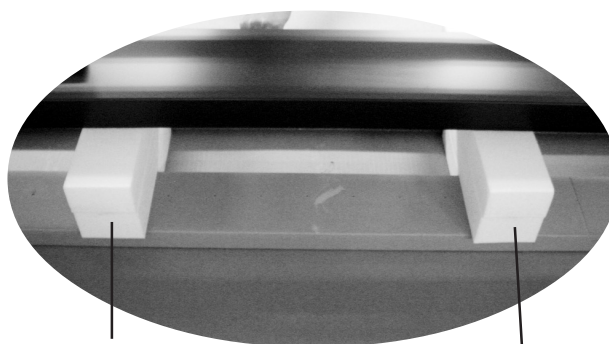


4. Remove the styrene foam holding the base of the printer, while lifting the feet as shown in the photograph.

Two persons are required to lift the feet and remove the styrene foam.

CAUTION

Take sufficient care so that your hand is not caught between the foot and the styrene foam.



Styrene foam

Styrene foam

5. Release the stopper on the caster (two-wheel) in the front of the machine.

- 6.** Install the two slope plates supplied as shown in the photograph on the left, and move the machine to the floor along the plates.



Slope



4.2.2 Inspecting after unpacking

Inspect the followings after cleaning away the unpacked materials and dust.

(1) Inspecting components

Inspect that there is no lack of components according to the packing list.

If there is a lack of components, contact our dealers.

(2) Inspecting damages

Inspect that there is no damage on the products during transportation.

If there is a damage on the products, contact our dealers.

4.3 Transporting the Printer to the Space to be Installed

There are two transporting methods for the printer; one is an united type transportation that transports the printer as one integrated unit using the casters, another is a separate type transportation that transports the upper block and leg block of the printer separately.

The separate type transportation is recommended for long distance transportation.

4.3.1 United type transportation

Transport the printer using the casters to the space to be installed after unpacking.

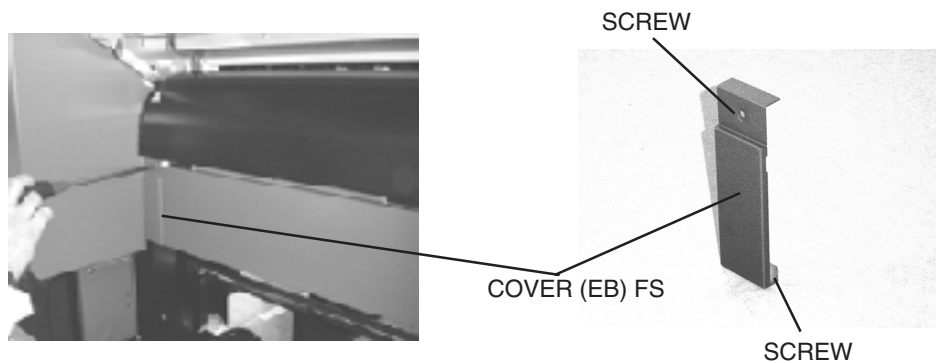
NOTE

- When transporting the printer, according to the condition, pack the printer again after removing the ink cartridges, replacing the waste ink bottle to new one, and discharging ink in the tube.
- When the floor surface for transporting is unevenness, lay out the board on the floor to prevent damage of the casters.

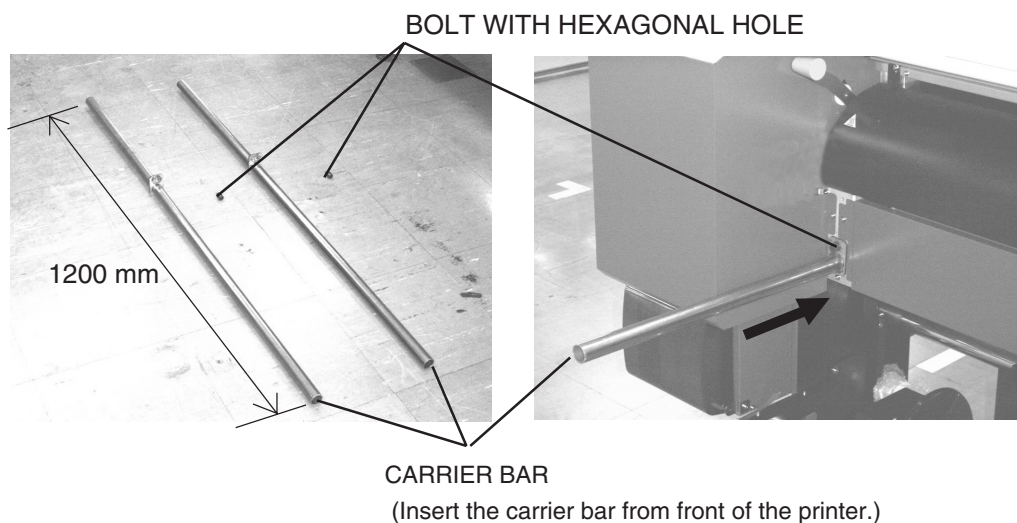
4.3.2 Separate type transportation

When a passageway is narrow or the printer cannot be transported in an elevator, separate the printer to upper block and leg block and transports them according to the following procedures.

1. Remove COVER (EB) FS from the printer. (Right and left, each two screws)

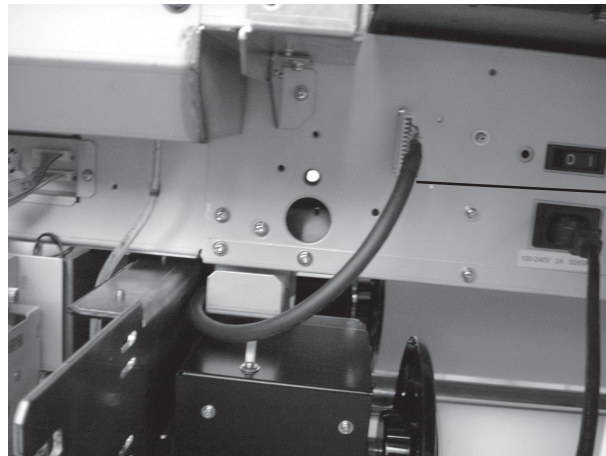


2. Mount the carrier bar into the printer. Secure them with (M8 x 16) bolt with hexagonal hole.



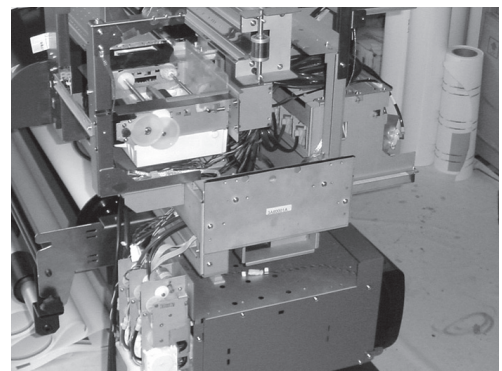
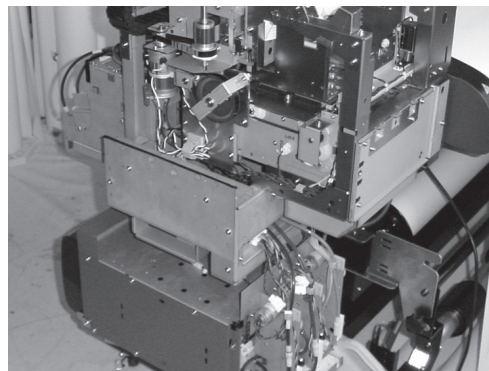
(Insert the carrier bar from front of the printer.)

- 3.** Disconnect the winding device cable.



WINDING DEVICE CABLE

- 4.** Remove the waste ink tube.
- 5.** Remove the front and back main tank covers. (Right and Left)
- 6.** Remove the side covers. (Each two)

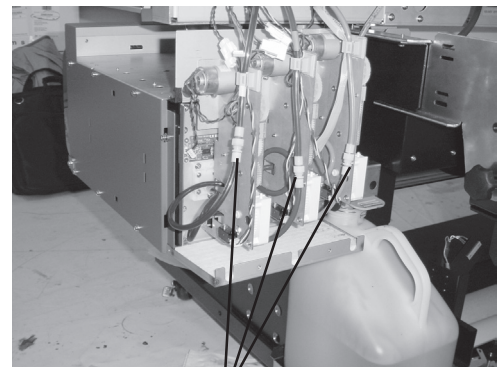


- 7.** Disconnect the ink tube connectors on the main tank part.



5 pcs. (CAP SIDE)

4 pcs. (WIPE SIDE)



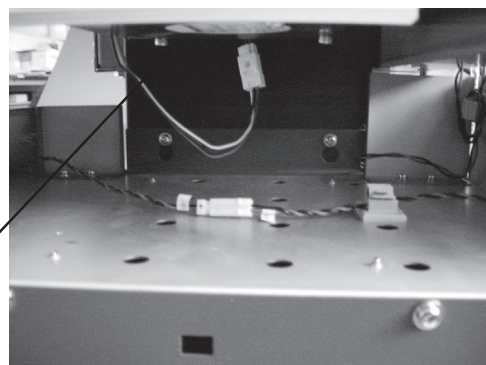
INK TUBES

- 8.** Remove the main tanks. (Right and left)
- 9.** Remove the cooling fans and fitting plates. (right and left)
(Tool: Hexagonal wrench for M4 size)



FITTING PLATE

COOLING FAN



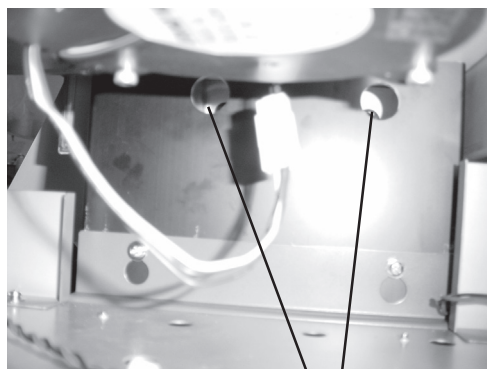
- 10.** Loosen the upper screws of the reinforcement plate, and remove the lower screws of the reinforcement plate.

For attaching, slide the reinforcement plate to inside and tighter the loosen screws.

(Tool: Socket wrench for 9.5 mm □)

- Hexagonal socket: 6 mm
Length: 52 mm, Max. external diameter: 17 mm
- Extension
Length: 75 mm, Max. external diameter: 17 mm
- Socket wrench handle
Length: 180 mm, Round model, Diameter: 10 mm

KTC HB20-6 BRM20 BE20-75 or equivalents

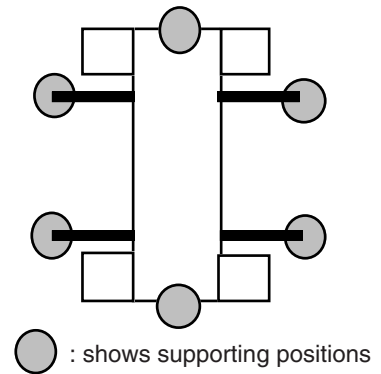


SCREW WITH HEXAGONAL HOLE



REINFORCEMENT PLATE (INSIDE)

- 11.** Transports the upper block of the printer by holding the jigs (front / back / right / left) at least 6 persons.



CAUTION

Do not hold the paper guide for transferring.

- 12.** Transports the leg block of the printer by using the casters.



- 13.** After transporting, mount the upper block of the printer on the leg block of the printer and assemble the printer according to the reverse order of the separation for transporting.

4.3.3 Crane transportation

When crane transportation is needed, cover front and back of the printer with blankets not to damage the printer.

Do not touch the paper cover and ink cartridge covers.

Only legs of the printer are allowed to hang ropes.

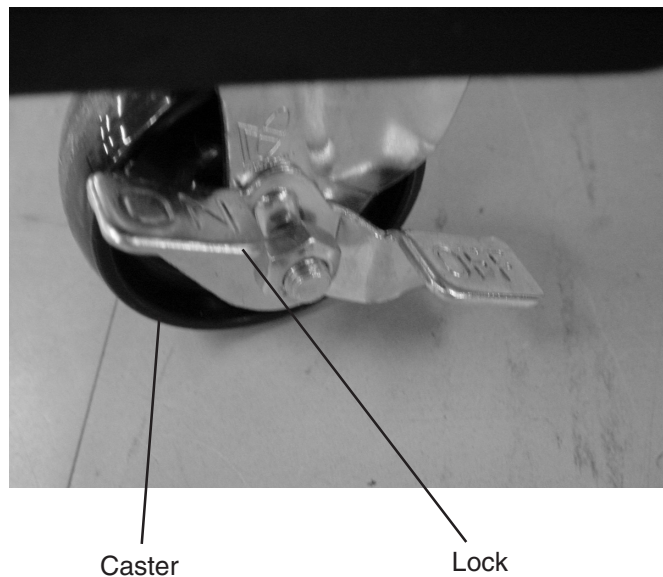
4.4 Installation

After moving the printer to the user-specified location, install it in the following steps. Installation consists of fixing of the printer, installation of ink cartridges, roll paper, or other accessories, and interface and power cable connection prior to power-up.

Options should be installed according to the user's specifications. See the related sections as required.

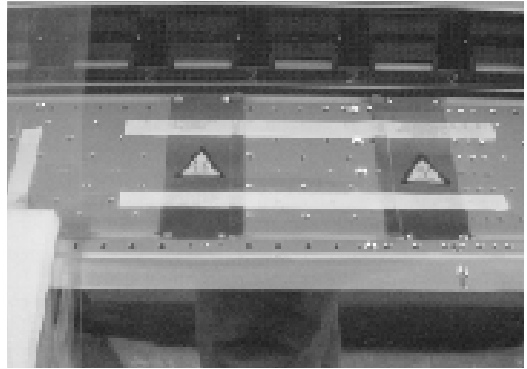
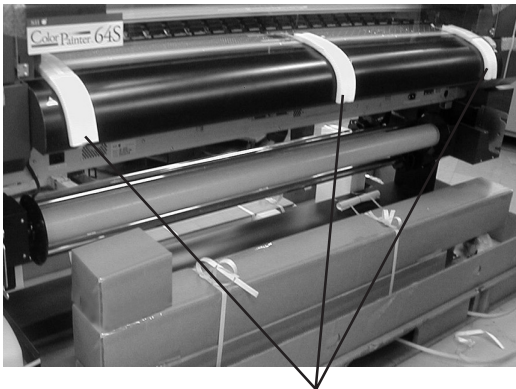
4.4.1 Printer installation

- 1.** Push the locks of all the casters (two-wheel) down as shown below to lock them.

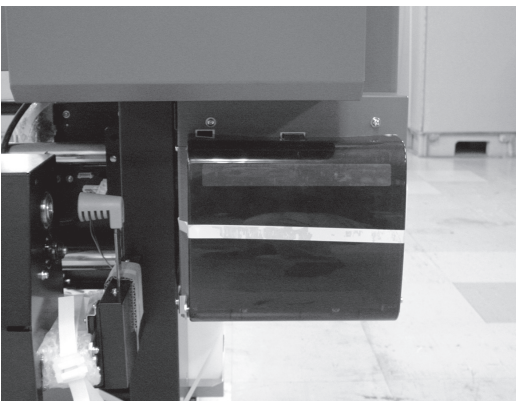


4.4.2 Removing cushioning materials and fittings

1. Remove all tapes and air packing from the machine.



Cushion materials

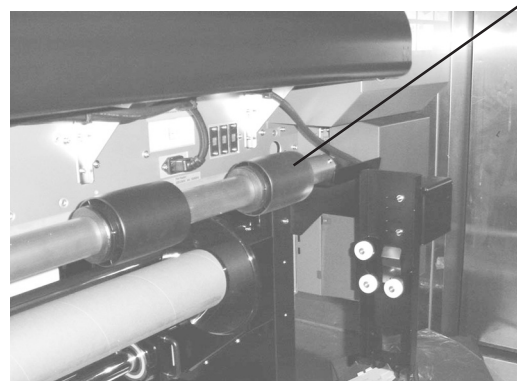
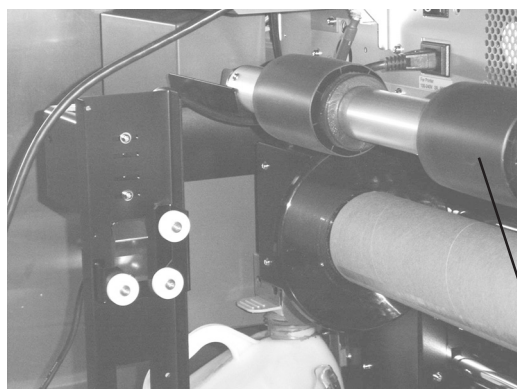


4.4.3 Installing the tension roller and winding sensor into the winder unit.

1. Attach the tension roller and the fitting plate to the winder unit. (Right and left)

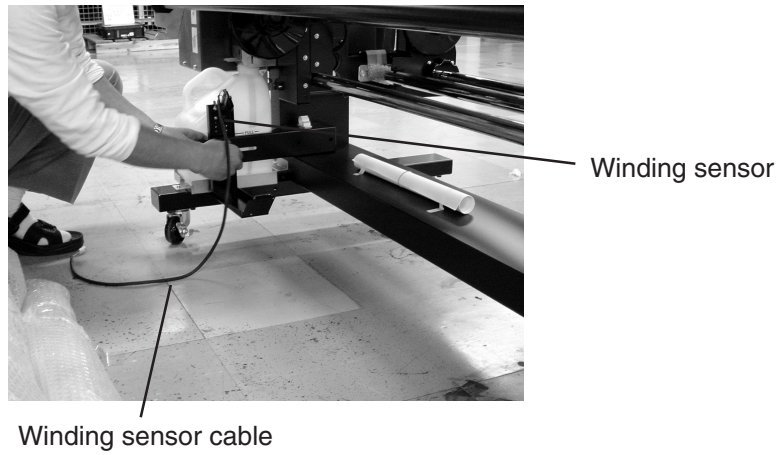


Tension roller

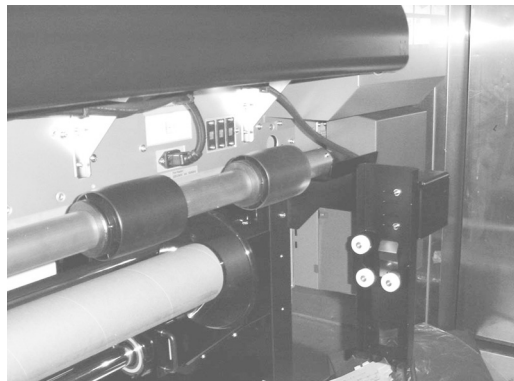


Tension roller

- 2.** Attach the winding sensor to the winder unit.



- 3.** Connect the winding sensor cable to the winder unit.



4.4.4 Installing the waste ink bottle and ink cartridge

Waste ink bottle



WARNING

- The waste ink bottle must not be exposed to open flames. It might result in fire.



CAUTION

- Do not attempt to disassemble the waste ink bottle.
- Do not swallow the ink nor drop it into eyes. It may cause difficulty in breathing or damage to eyes.
- Do not drop the ink on the skin. If it is got on the skin, wash it off.
- Close the cap of a used ink cartridge, put it into a plastic bag and dispose of it as an industrial waste. Observe any regulations for disposal of ink cartridges.

CAUTION

- Install the waste ink bottle securely. If not, the amount of waste ink cannot be detected correctly, causing a spillage.
- A waste ink bottle must always be installed. If it is removed for replacement, a new one must be installed.
- Remove and install the waste ink bottle with both hands. Do not turn it over.

Ink cartridges



WARNING

- Ink cartridges must not be exposed to open flames. It might result in fire.



CAUTION

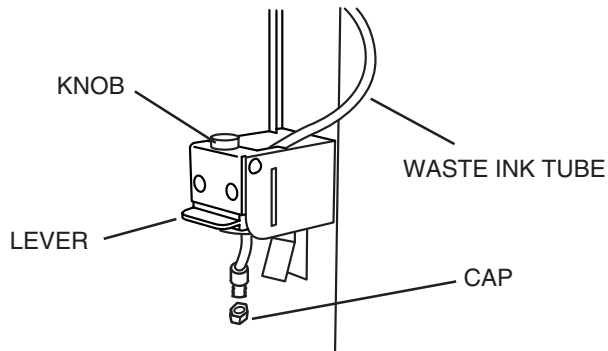
- Do not swallow the ink nor drop it into eyes. It may cause difficulty in breathing or damage to eyes. Keep the ink out of reach of children.
- Do not drop the ink on the skin. If it is got on the skin, wash it off.
- Do not attempt to disassemble ink cartridges.
- Put a used ink cartridge into a plastic bag and dispose of it as an industrial waste. Observe any regulations for disposal of ink cartridges.

CAUTION

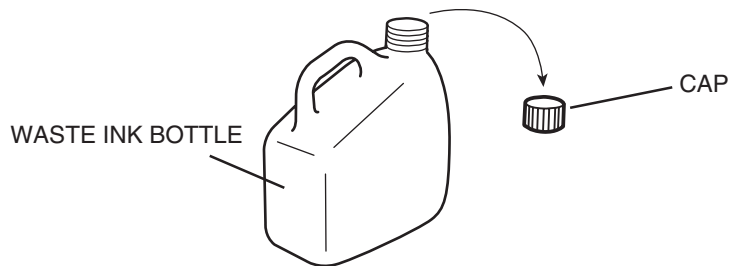
- Use the Seiko-recommended ink cartridges. Failure to use the recommended ink cartridge may lead to a deterioration of the print quality or a printer malfunction.
- The valid period of the ink is 12 months after the manufacture date.
- Do not shake ink cartridges before use.
- All six color cartridges must be installed.
If any of the cartridges is removed, a new one must be installed.
- Ink has an expiration date. If it is exceeded, the printer quality may deteriorate or the printer may malfunction.
- Store ink cartridges in a dry, cool and dark place.

Install the waste ink bottle and ink cartridge according to the following procedures.
Install the waste ink bottle before installing the ink cartridge.

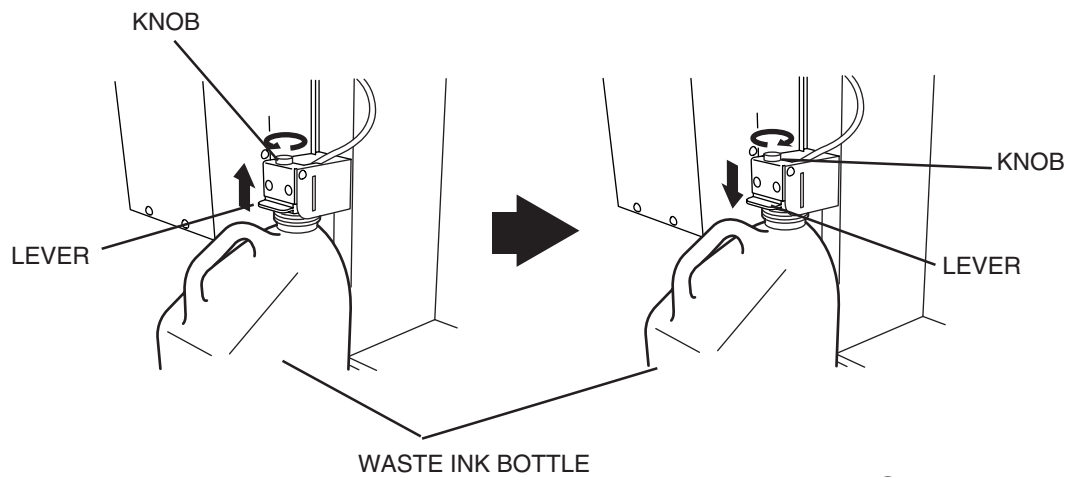
1. Remove the cap of the waste ink tube.



2. Remove the cap of the waste ink bottle.



3. Loosen the knob, lift the lever, install the uncapped waste ink bottle, and close the knob.

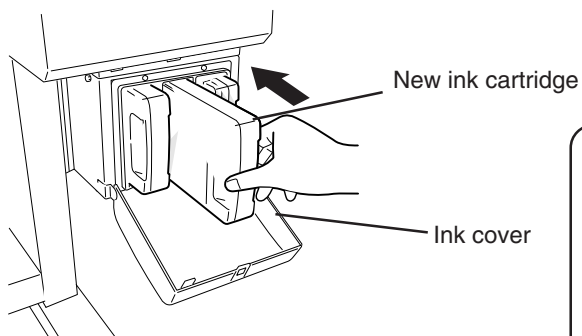
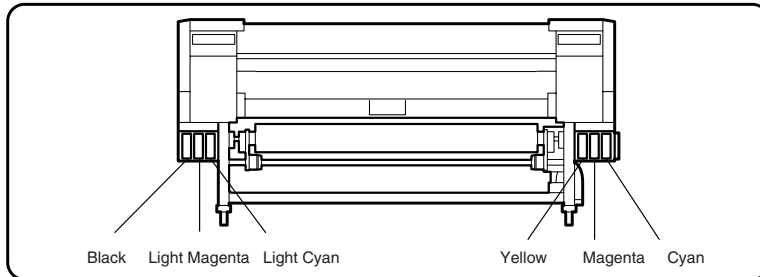


NOTE

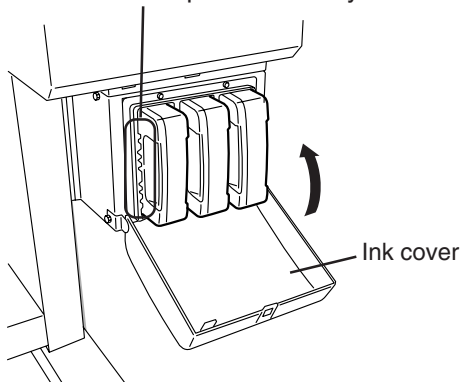
If the waste ink bottle is not installed correctly, waste ink may spill over the floor.

- 4.** Check each color ink cartridge slot and install each ink cartridge in its slot (all six colors).

From the front



Insertion error prevention key

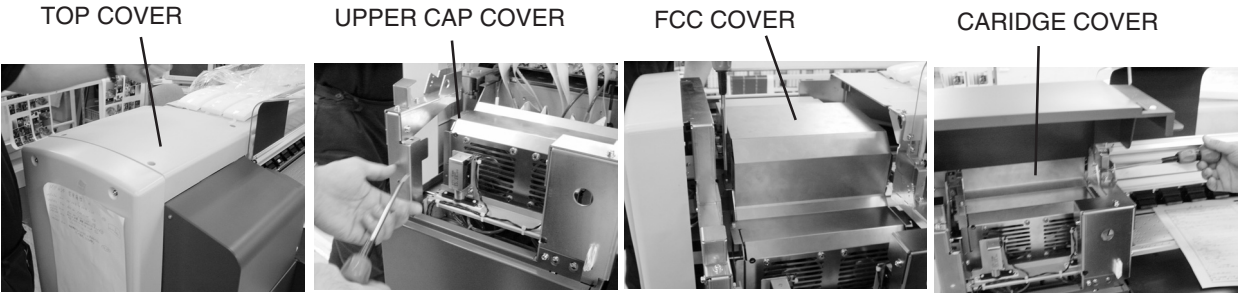


NOTE

- Each ink cartridge has an insertion error prevention key. It cannot be inserted in a wrong slot. If an ink cartridge cannot be inserted, check whether the cartridge color matches the slot.
- Never shake the ink cartridge. If doing so, it causes print malfunction.

4.4.5 Removing carriage fitting parts/joining ink tubes to the head

- 1.** Remove the top cover (4 screws), the upper cap cover (right and left , each 2 screws), the FCC cover, and carriage cover in this order.



- 2.** Remove each head cap and ink tube cap. Join each head and each ink tube correctly according to the tape color on each head tube. (See the figure below.)



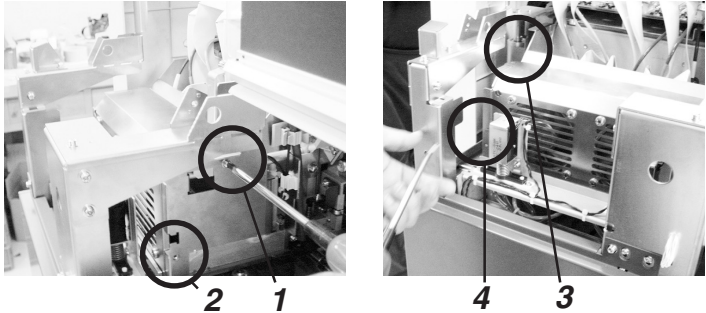
Tape color	Ink color
White	C, Bk
Green	M, Lm
None	Y, Lc

- 3.** Attach covers in the reverse order of procedure 1.

NOTE

- Screw tightening order and torque for the carriage cover must be managed as follows.
- Screw tightening order management:

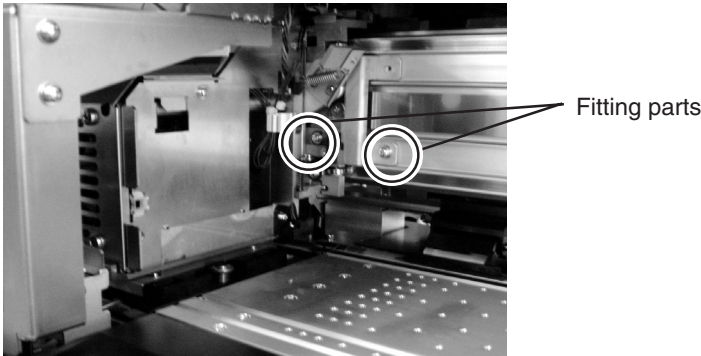
Follow the order below



- Screw tightening torque management:

Tighten the screw with 49 N (5 kgf) torque screwdriver in the above order.

- 4.** Loosen the screw holding the carriage unit and remove the fitting parts.



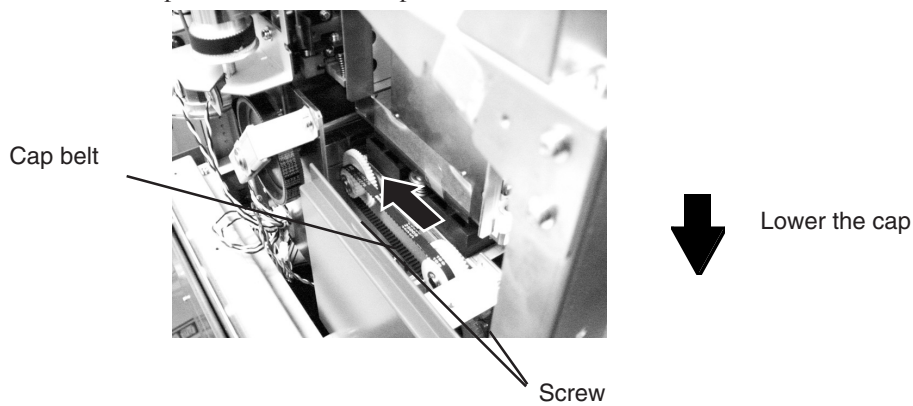
- 5.** The rev.C printer has a head protection sheet under the head carriage. Remove the head protection sheet from the head carriage according to the following procedures.
Two ways are available for removing the head protection sheet.

6-1: Simple way

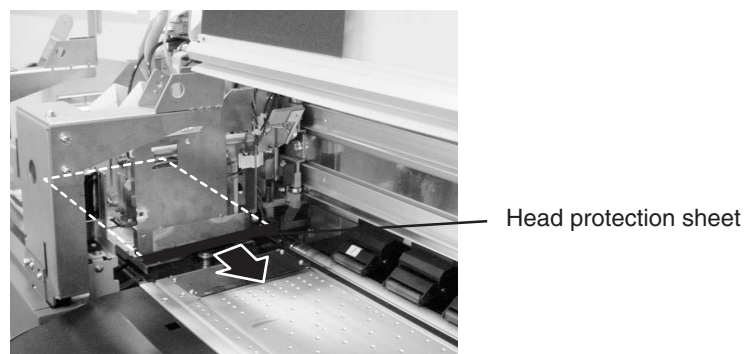
6-2: Safety way

- 6-1.** Turn on the printer and open the rear cover immediately after lowering the cap not to move the head carriage. Refer to Section 4.4.7 Power cable connection about power on procedures of the printer.

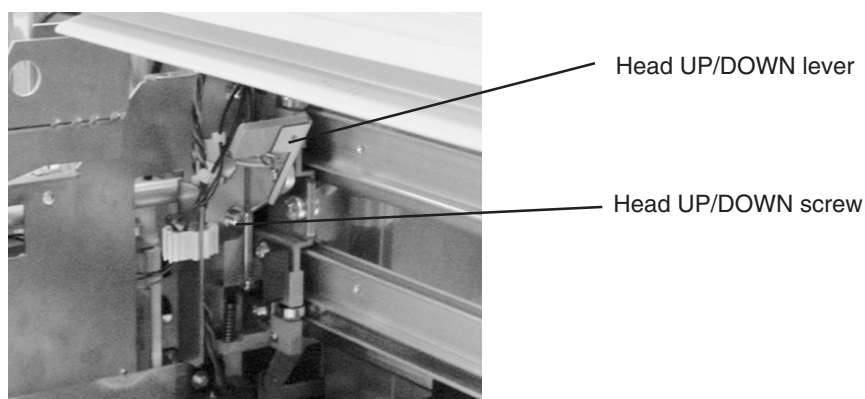
- 6-2.** Remove two screws covering the cap gear. Turn manually the cap belt forward direction of the printer to lower the cap.



- 7.** Pull out the head protection sheet laid under the carriage.

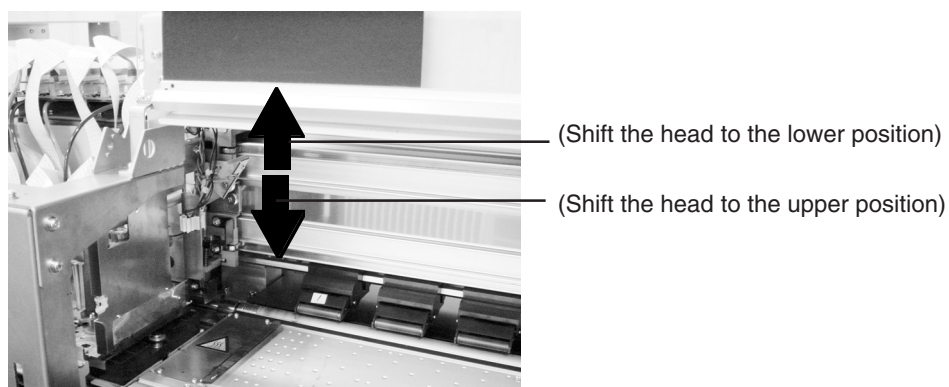


- 8.** Loosen the head UP/DOWN screw, change the head position to the lower position by changing the head UP/DOWN lever, and secure the head UP/DOWN screw.



NOTE

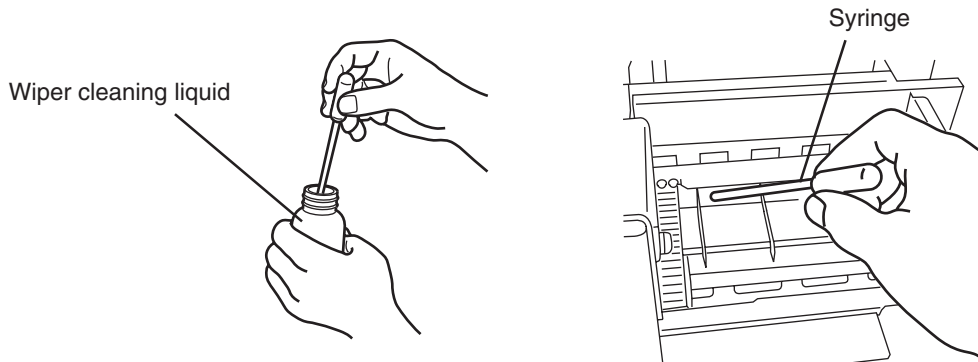
When the printer is shipped with the head protection sheet, the head is secured to the upper position by using the head UP/DOWN lever.



- 9.** When covers are removed in 6-2 Safety way, attach the covers as they were. When using 6-1 Simple way, close the rear cover.

4.4.6 Filling wiper cleaning liquid to the wiper sponge

When installing the printer, always fill wiper cleaning liquid to the wiper sponge and explain customers about regular maintenance.



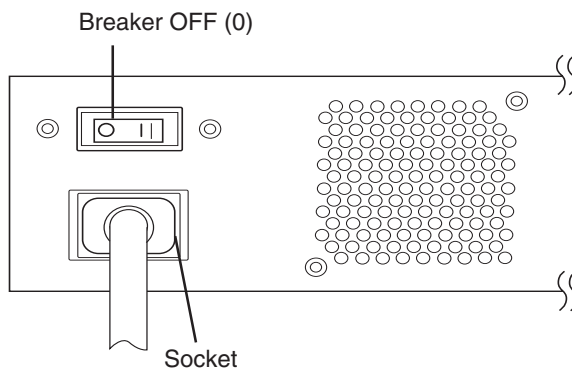
Refer to "Maintenance" in the User's Guide for details.

4.4.7 Power cable connection

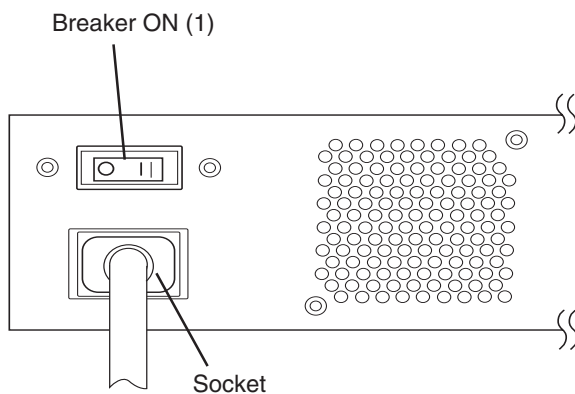
CAUTION

Verify that the power supplied to the electrical outlet meets the requirements of the printer before connecting the power cable.

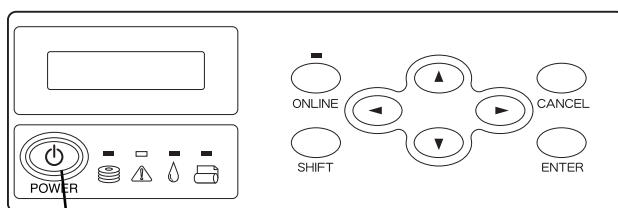
Turning the Power On
<Printer>



1. Turn OFF (0) the breaker on the left rear of the printer, and plug one end of the supplied power cable into the socket of the printer. Insert the other power plug of the cable into an electrical outlet.



2. Turn ON (I) the breaker on the left rear of the printer.



Power ON/OFF switch

3. Turn ON the power ON/OFF switch on the operation panel.

When the switch is turned ON, a power-on self-diagnostic test is performed and the following message appears on the LCD on the operation panel.

NOTE

When the printer is left for one month or more, Engine error 11E0 is displayed.

In this case, clear the flag by entering the engine maintenance mode.

<How to enter the engine maintenance mode>

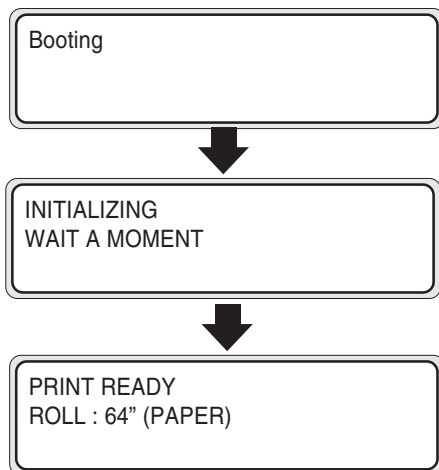
1. Turn on the printer by pressing POWER key while pressing **SHIFT** and **CANCEL** keys.

ENGINE ERROR 11E0
POWER OFF/ON

2. While the display is appearing, press **SHIFT**, **▲**, **▼**, and **▶** keys in the order listed.

▲ ADJUST H.MNTE ▼
◀ H.ADJ RESET ▶

3. Turn off the printer in this state.
4. Normally turn on the printer.



If a 64" paper roll is used

NOTE

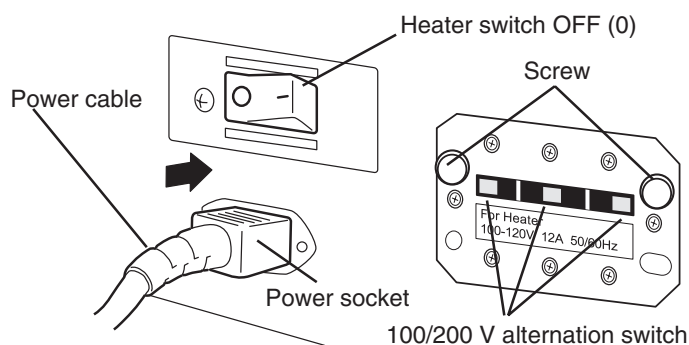
- When the circuit breaker on the right rear of the printer is turned ON, the printer is turned ON and power-on self-diagnosis starts even when the power ON/OFF switch on the operation panel is not pressed.
- Turn OFF the printer while "PRINT READY" is displayed on the LCD panel except emergency.
Do not turn OFF the printer while "INITIALIZING" or "CLEANING" is displayed on the LCD panel to avoid drop of the ink and damage of the head.



HINT

- If the fan does not run or the operation panel lamp does not light when the circuit breaker and power ON/OFF switch of the printer are turned ON, the power supply may be faulty.
- If an error is detected during the self-diagnostic test at power on, an error message appears on the LCD.

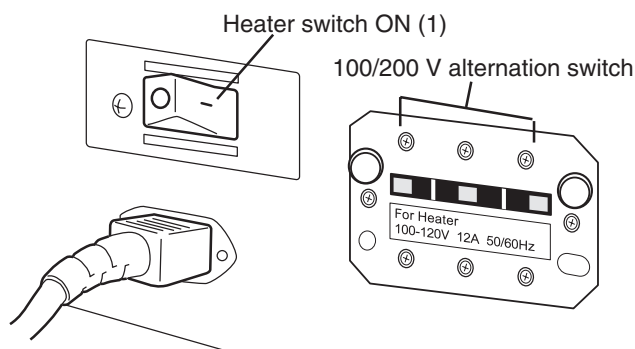
<Heater>



1. Set the 100/200 V alternation switch according to the power to be used.
2. Turn OFF the heater switch on the right rear of the printer, and plug one end of the supplied power cable into the socket of the printer. Insert the other power plug of the cable into an electrical outlet.

NOTE

- The 100/200 V alternation switch is set to 200 V at shipping.
- Remove green screws on both right and left sides, remove the plate, and set the 100/200 V alternation switch to the voltage to be used.



NOTE

- Do not use the other power cable than specified in this printer.
- Verify that the supplied power cable meets the local AC power supply specifications.
- Verify that the 100/200 V alternation switch setting meets the local AC power supply specifications.

3. Turn ON the heater switch on the right rear of the printer to turn the heater control panel ON.

4.4.8 Installing paper roll

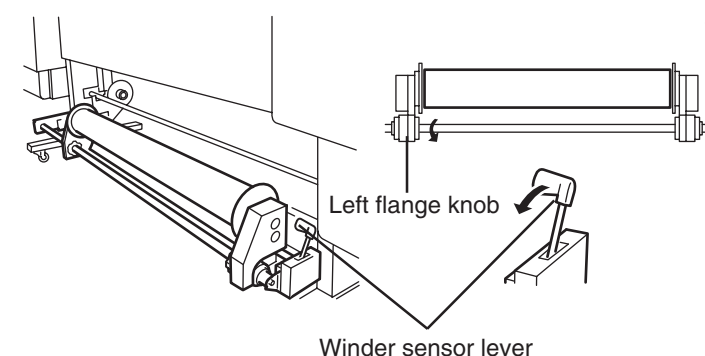
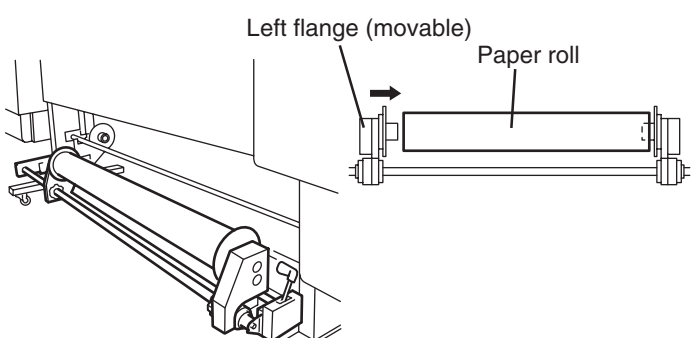
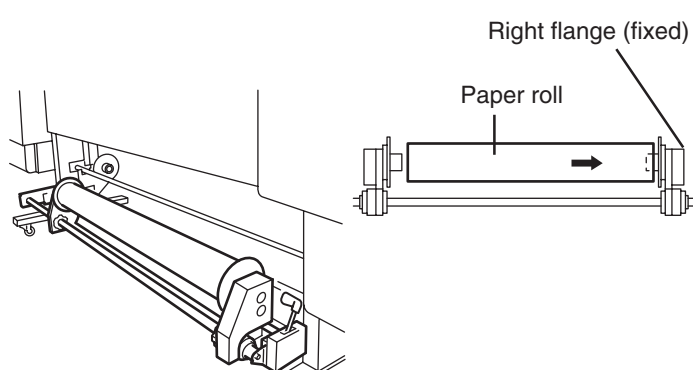


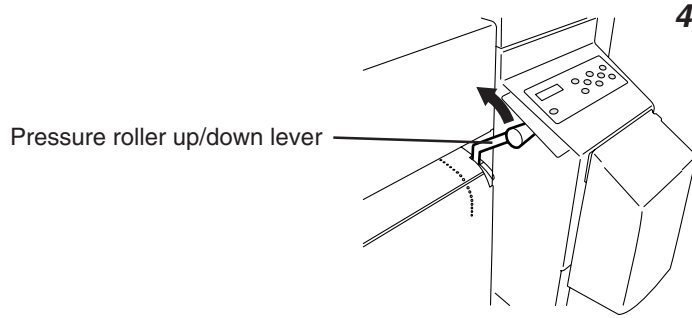
CAUTION



Since the paper roll is heavy, be careful not to drop it on your foot. It may cause injury.

■ Paper supply side

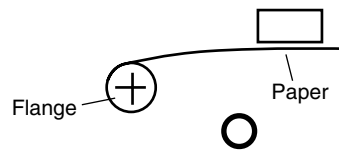




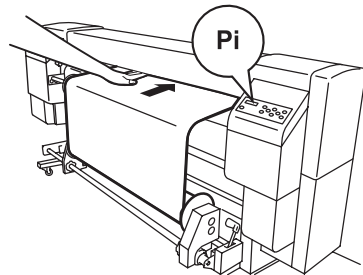
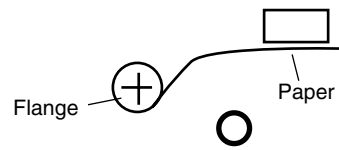
- 4.** Lift the pressure roller up/down lever.

(Paper setting direction)

<Outside rolling>



<Inside rolling>

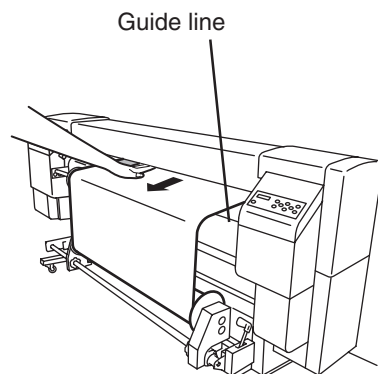


- 5.** Feed the paper until a buzzer sounds from the paper feeder.

Feed the paper until an edge of the paper goes out 200 mm or more from the paper outlet.

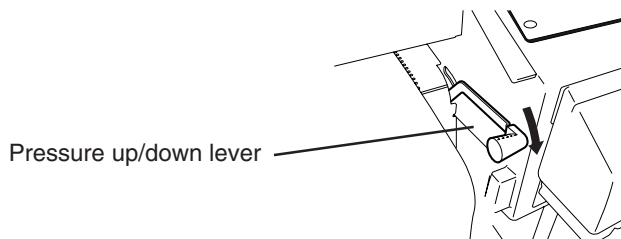
NOTE

- Paper may stick to the paper feeder and is hard to set due to operational condition especially low humidity. In such case, float paper from the paper feeder and set paper to the paper feeder by holding both edges of the paper.
- Be sure not to hit the edge of the paper roll by the rear cover.
- Be sure that the media edge guard is not set under the paper. (See page 2-43 Using the Media Edge Guard.)



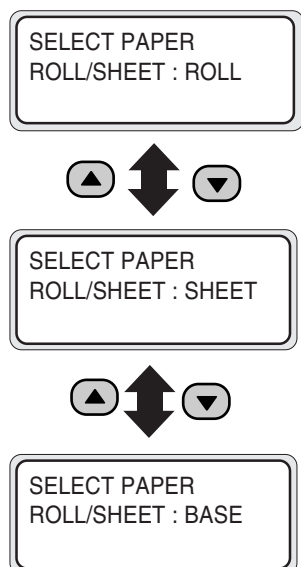
- 6.** When feeding a paper roll, hold it at the center and rewind the flange to take up the slack in the paper.

The guide line on the printer is no more than a guide line. Install paper roll on the printer in a straight line against the paper roll.



7. Push down the pressure roller up/down lever.

Perform operations according to the guidance message shown on the LCD.



8. Select either paper roll or cut sheet.

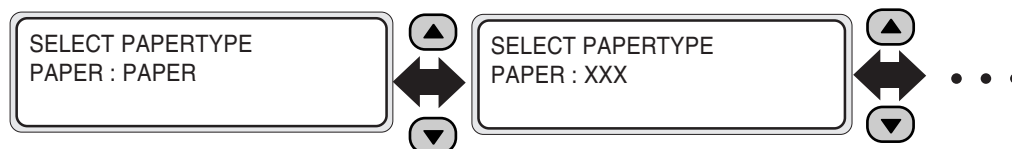
Select ROLL PAPER, CUT SHEET , or BASE with or key.

(See Page 2-29 "Using the Origin Point Setting Function" about "BASE".)

Press the **ENTER** key to change setting.

Press the **CANCEL** key to leave the setting as it is.

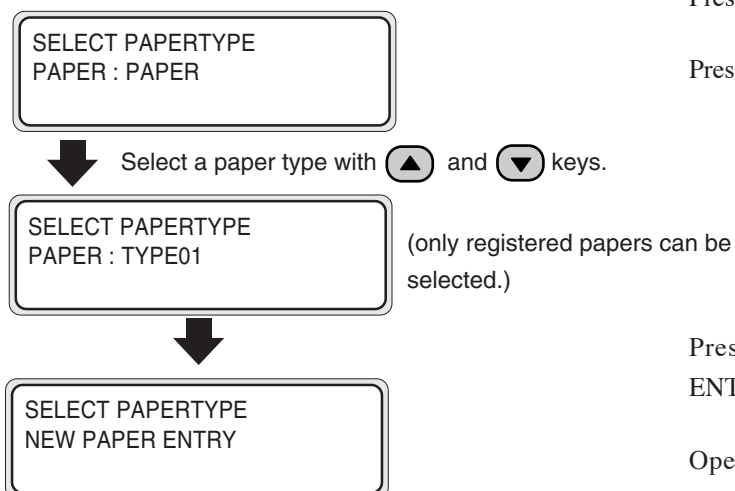
9. Select a paper type.



Select paper type with or key.

Press the **ENTER** key to change setting.

Press the **CANCEL** key to leave the setting as it is.



Press **ENTER** key to enter to NEW PAPER ENTRY menu.

Operation of the new paper entry is same as operation for paper entry from ENTRY menu.

Press **CANCEL** key to return to SELECT PAPERTYPE menu.

PREPARING PAPER
WAIT A MOMENT



10. The paper will be set automatically.

- If it is ended normally, return to offline or online state.
- If abnormal end occurs, an error message will be displayed.
Go back to steep 1.

4.4.9 Initial Ink Filling

NOTE

The initial ink filling is required only when the printer is installed for the first time.

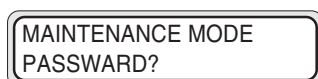
Fill ink as follows:

1. Enter the engine maintenance mode from the operation panel and fill ink.

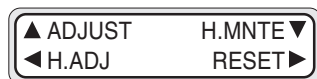
- (1) Press **ONLINE** key on the operation panel to set off-line mode.



- (2) Press **CANCEL**, **SHIFT**, **CANCEL**, and **CANCEL** keys in the order listed.



- (3) On the password input screen, press **SHIFT**, **▲**, **▼**, and **▶** keys in the order listed.



- (4) Press **▼** key to enter the head maintenance menu.



- (5) Press **ENTER** key.



- (6) Press **ENTER** key.



4.5 Transferring

Once installed the printer and filled ink, always discharge ink before transferring the printer to other place.

4.5.1 Discharging ink

Discharge ink on the operation panel operation as follows:

NOTE

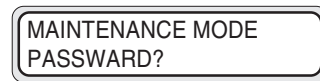
Before performing ink discharge, always replace waste ink bottle to new one.

Enter to engine maintenance mode and perform ink discharge.

- (1) Press **ONLINE** key on the operation panel to enter off-line mode.



- (2) Press **CANCEL**, **SHIFT**, **CANCEL**, and **CANCEL** keys.



- (3) On the PASSWORD INPUT MODE screen, press **SHIFT**, **▲**, **▼**, and **▶** keys.



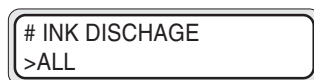
- (4) Press **▼** key to enter H. MNTE menu.



- (5) Press **▲** or **▼** key to select "INK DISCHARGE".



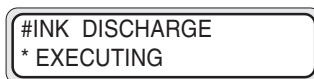
- (6) Select "ALL."



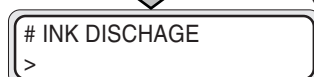
- (7) Press **ENTER** key.



- (8) Press **ENTER** key.



(It takes twelve to thirteen minutes.)



Section 5 Parameter Setup

After the printer, options and consumables have been installed, you should turn the printer on, set parameters according to the user's operating environment using the printer operation panel, check the printer operation, connect the printer with a computer, and check the system performance.

For information on panel operations and parameter settings, see the "IP-6600 User's Guide."

See **Section 6** for details on the printer operation check, see **Section 7** for details on connection with computers, and see **Section 8** for details on the system operation check.

Section 6 Printer Operation Check

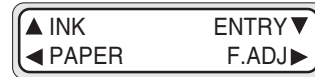
After the parameters have been set, the printer must be turned on and its operation must be checked.

- TEST PRINT

6.1 Test Print

Perform test print as follows:

1. When “PRINT READY” is displayed by turning the printer on, Press the **ONLINE** key to make the printer offline.



2. Press the **SHIFT** key until “◀ ADJUST” is displayed.



3. Press the **◀** key to enter “ADJUST” menu.

4. Press the **ENTER** key to print the test print.
Take a measure by referring to the maintenance manual when dot-missing and inclination are occurred.



Section 7 Interface Cable Connection

After the printer is set up and checked, the interface cables should be connected.

CAUTION

Before connecting or disconnecting interface cables, turn the printer and the computer off.

7.1 Connection and Configuration

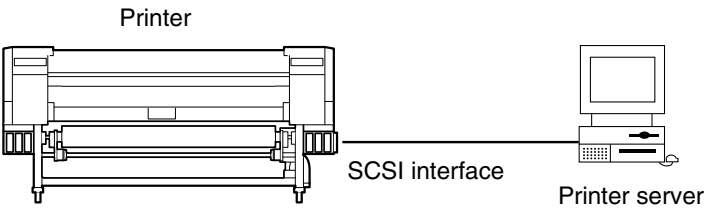


Figure 7-1 System Configuration

7.2 Interface Cable

The following interface cable is available.

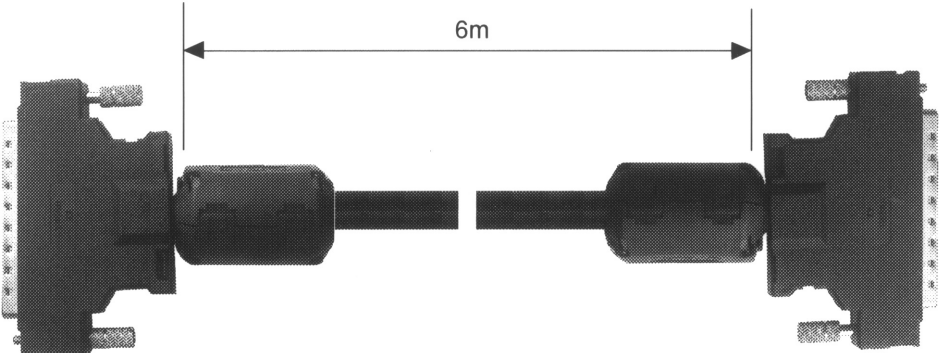


Figure 7-2 SCSI Cable

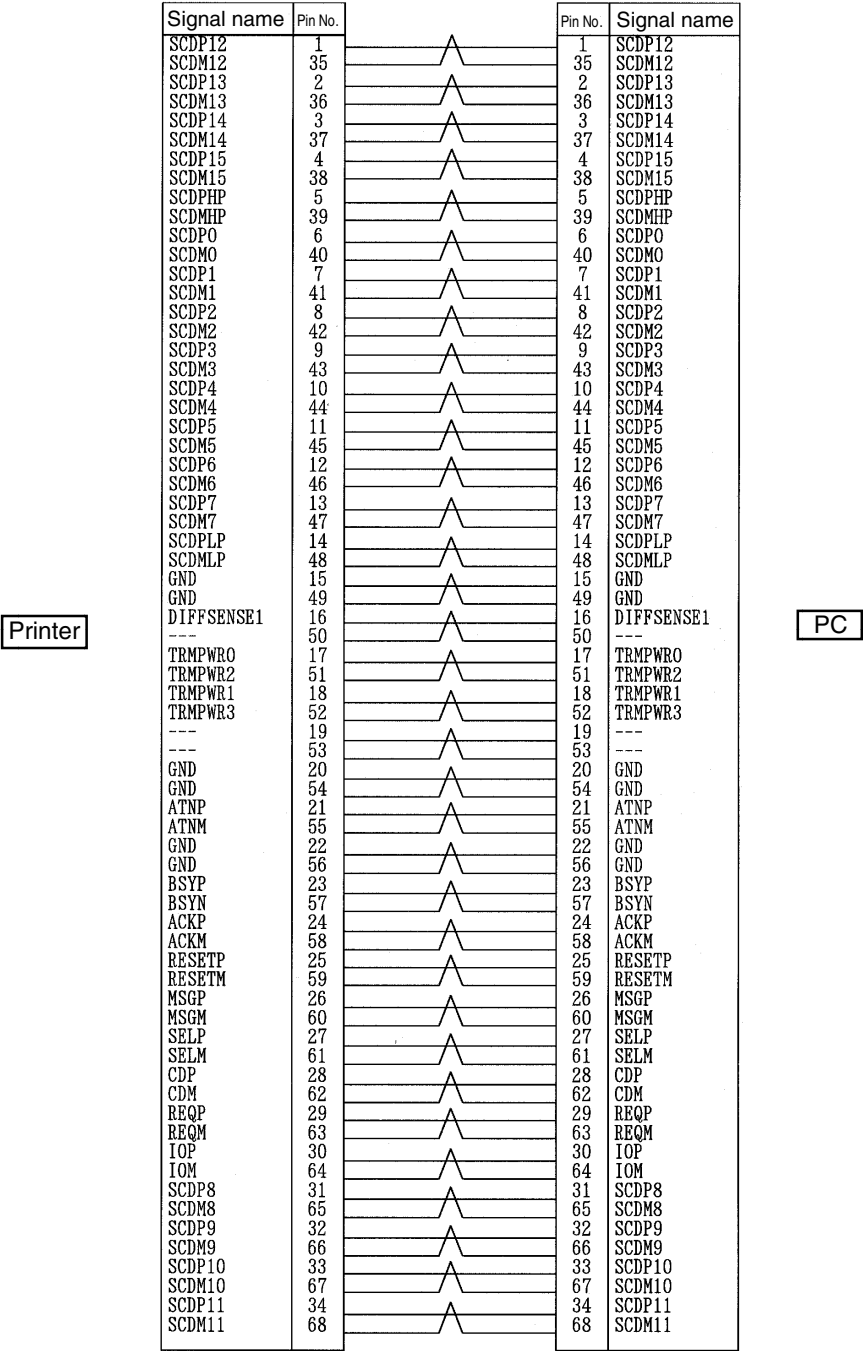


Figure 7-3 SCSI Cable Wiring Diagram

7.3 Connection Method

CAUTION

- Before connecting or disconnecting the SCSI interface cable, turn the printer and the computer off.
- After connecting the SCSI cable, turn the printer on, then the host computer on.
- The SCSI ID must be different from SCSI IDs of any other SCSI devices.

Connect interface cables to the interface connectors on the back of the printer and the corresponding connectors on the computer.

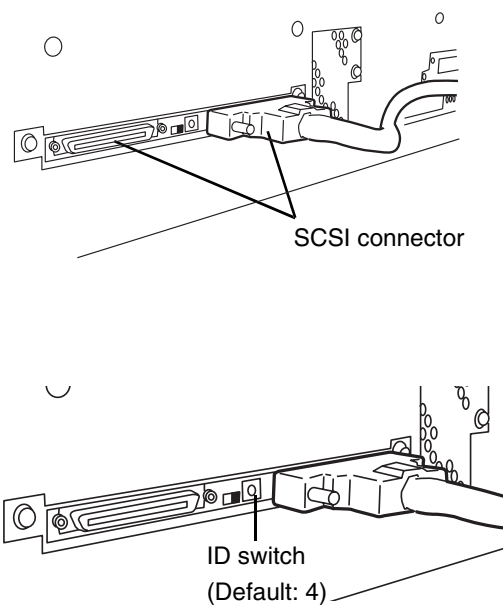


Figure 7-4 SCSI Interface Connector Positions

Section 8 System Operation Check and Installation Completion

After the interface cables are connected between the printer and the computer, the system operation must be checked, and additional checks must be made to complete installation.

8.1 System Operation Check

To check the system operation, follow the steps below.

- 1.** Turn the printer on.
- 2.** Turn each computer on and let the user verify that there is nothing wrong with the computer.
- 3.** Send data from the computer and check that it is correctly plotted.
- 4.** When data is plotted correctly, the system operation check is completed.
If it is not plotted correctly, check the printer setup items again, ask the user to check computer settings, and test the system operation again.
If an error message is displayed, take appropriate action according to the message.

8.2 Check After System Verification

After confirming that the printer works properly, check the following items again before completing installation.

- (1) Verify that the cables are connected correctly and do not interfere with the other things.
- (2) Verify that the levelers and casters are supported properly and that the printer is installed horizontally.
- (3) Verify that there are no foreign matters left in the printer.

After the above confirmation, make sure that all the covers of the printer are closed.

CAUTION

Before the printer is turned off, obtain approval from the user.